Response dated: December 13, 2007

Reply to Ex Parte Quayle action of October 17, 2007

Amendments to the Specification:

Please replace the paragraph on page 11, line 13 through page 12, line 2 with the following rewritten version:

Fig. 5a and 5b are perspective views depicting the construction of the infrared processing module. Referring to Figs. 5a and 5b, one sensing region 40 is enclosed by a silicon window 41 having a long pass filter, through which only infrared radiation corresponding to the radiation in an internal temperature range of the body is passed. A radiation thermofile detector is a combination of two different metal thermocouples connected in series. An active or hot joint of the detector is melanized to effectively absorb the radiation, while a basis or cold joint is maintained at an ambient temperature of a base 43 of the infrared radiation detecting portion 32. The absorption of the radiation by the melanized region causes the temperature of the hot joint to be increased in proportion to the cold joint. The temperature difference generates a voltage in the detector. The cold joint connected to the base 43 of the infrared detecting portion 32 is thermally coupled to a basis absolute temperature sensor, such as a thermister. A front of the infrared radiation sensing region is covered by a proper infrared bandpass filter 42 having an important spectra characteristic to a radiation line, which is a radiation of a particular wavelength, of the measured analyte. The sensor base 43 or housing attached to the cold joint is thermally contacted to the body such as an external auditory meatus. The infrared radiation emitted by the tympanum radiates upon the hot joint to increase the temperature of the hot joint. The basis 43 having relative high calories and the cold joint thermally contacted to the body are a reference point relative to a point where the infrared radiation spectrally changed due to the concentration variation of the analyte.